

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Lofts Seed, Inc.**

Whereas, THERE HAS BEEN PRESENTED TO THE  
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OF THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

KENTUCKY BLUEGRASS

'Mystic'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 27th day of May in the year of our Lord one thousand nine hundred and eighty-two.

Attest:

*Kenneth H. C.*  
Acting  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*John R. Block*  
Secretary of Agriculture





## INSTRUCTIONS

**GENERAL:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

### ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.





UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED  
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY <b>P-141, P-140, or EchoLakePlh</b>		1b. VARIETY NAME <b>Mystic</b>		FOR OFFICIAL USE ONLY PV NUMBER <b>8100157</b>	
2. KIND NAME <b>Kentucky Bluegrass</b>		3. GENUS AND SPECIES NAME <b>Poa pratensis L.</b>		FILING DATE <b>8/26/81</b>	TIME <b>10:00</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A.M.</span> P.M.
4. FAMILY NAME (BOTANICAL) <b>Gramineae</b>		5. DATE OF DETERMINATION <b>1973</b>		FEE RECEIVED \$ <b>500.00</b> \$ <b>250.00</b>	DATE <b>8/26/81</b> <b>2/10/82</b>
6. NAME OF APPLICANT(S) <b>Lofts Seed Inc.</b>		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Chimney Rock Rd., P. O. B. 146 Bound Brook, New Jersey 08805</b>		8. TELEPHONE AREA CODE AND NUMBER <b>201-560-1590</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <b>Corporation</b>		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION <b>New Jersey</b>		11. DATE OF INCORPORATION <b>11/10/48</b>	
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: <b>Mr. Richard H. Hurley, Loft Seed Inc., P.O.B. 146, Chimney Rock Road, Bound Brook, New Jersey 08805</b>					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ YES ☐ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?

☒ FOUNDATION ☐ REGISTERED ☒ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

**Aug. 14 1981**  
(DATE)

**Richard H. Hurley**  
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)



## EXHIBIT 13A

ORIGIN AND BREEDING HISTORY OF THE VARIETY MYSTIC KENTUCKY BLUEGRASS

1. Breeders Reference No. P-140, Echo Lake Plh, or No. P-141.
2. In 1960 a Kentucky Bluegrass plant was collected from Echo Lake Country Club, New Jersey by Ralph Engel, Turfgrass Specialist, Rutgers University in the presence of Al Caravella, Golf Course Superintendent. It was transplanted to a space plant nursery at Rutgers University. Seed was harvested from this plant and utilized for establishing an evaluation turf plot.
3. Examination of space plant progeny tests conducted in 1970 by Dr. C. Reed Funk indicated that over 90% of the plants in the progeny of Mystic were indistinguishable from their maternal parent indicating a high level of apomictic reproduction.
4. Subsequent space plant progeny tests at Rutgers and turf trials conducted at Rutgers University, University of Illinois and seed increase fields in Post Falls, Idaho have confirmed apomictic nature and uniformity of Mystic.
5. Observations and evaluation ratings of Mystic from turfgrass trials conducted at Rutgers University, University of Illinois, Lofts Research, Martinsville, New Jersey, United States Department of Agriculture, Beltsville, Maryland, indicate that Mystic is a promising entry distinctly different from all other cultivars and experimental selections.





ORIGIN AND BREEDING HISTORY OF THE VARIETY WHITE KENTUCKY BLUEGRASS

1. Breeder's Reference No. P-140, Bono Lake P.D. Co. No. 2-141.
2. In 1960 a Kentucky Bluegrass plant was collected from Bono Lake County Club, New Jersey by Ralph Engel, Turfgrass Specialist, Rutgers University in the presence of Al Canavella, Golf Course Superintendent. It was transplanted to a space plant nursery at Rutgers University. Seed was harvested from this plant and utilized for establishing an evaluation test plot.
3. Examination of space plant progeny tests conducted in 1970 by Dr. C. Reed Smith indicated that over 90% of the plants in the progeny of Myatie were indistinguishable from their maternal parent indicating a high level of sporadic reproduction.
4. Subsequent space plant progeny tests at Rutgers and turf trials conducted at Rutgers University, University of Illinois and seed increase fields in Postville, Idaho have confirmed sporadic nature and uniformity of Myatie.
5. Observations and evaluation ratings of Myatie from turfgrass trials conducted at Rutgers University, University of Illinois, Turf Research Station, New Jersey, United States Department of Agriculture, Beltsville, Maryland, indicate that Myatie is a promising entry distinctly different from all other cultivars and experimental selections.





EXHIBIT A, SUPPLEMENT TO APPLICATION

A space plant breeder seed nursery was established in 1978 near Post Falls, Idaho from seed produced in Adelphia, New Jersey. Breeder seed was harvested in 1979. The seed was used to plant a two acre foundation field near Post Falls, Idaho in 1979. This seed was used to establish a thirty-three acre field in the Spring of 1981 which will produce its first crop of certified seed in 1982. Additionally, in 1979 breeder seed was used to establish a twenty-four acre field near Madras, Oregon which produced its first crop of certified seed in 1980.

No variants have been observed or described. In each generation, Mystic has shown to be stable as phenotypic characteristics remain the same for each generation.

Mystic is approximately 90% apomictic. Most aberrants are smaller and weaker than the maternal plant and are of little significance in affecting seed production and/or turf quality. As Kentucky Bluegrass is facultatively apomictic aberrants are expected to occur whenever seed is harvested from the maternal plants. As most aberrants result from sexual reproduction, a wide variation is produced. Aberrants may differ in growth habits, size, leaf texture, color, maturity and panicle characteristics from maternal plants. Most aberrants display morphological differences from maternal plants.

Mystic is highly apomictic which does provide a uniform, stable variety. Maternal plants reproduce about 90% maternal plants in each generation. Aberrant progeny is rogued from breeder and foundation fields to insure uniformity and stability.







NOVELTY STATEMENT

Mystic Kentucky Bluegrass is a moderately low growing, turf-type variety which provides a light green color, relatively fine leaves and produces a dense, aggressive stand of turf. Flower initiation under New Jersey conditions has shown Mystic to be significantly earlier than all varieties evaluated except for Kenblue and Delta, which were three and one days earlier than Mystic (Table 1). Novelty of Mystic Kentucky Bluegrass is based on the unique combination of the following characteristics:

1. Displays an early flowering date (Table 1).
2. Light green color.
3. Moderately early spring greenup (Table 2,3,4,5,6,7,8,9,10).
4. Produces a relatively short growing plant (Table 11).
5. When maintained under turf conditions, Mystic competes well against Poa annua invasion (Tables 12,13).
6. Produces extensive tillers per plant (Table 14).
7. Good resistance to Erysiphe graminis (Tables 15,17).
8. Moderate susceptibility to Puccinea poae-nemoralis (Tables 16,18).
9. Good resistance to Ustilago striiformis (Tables 12,19).
10. Moderate susceptibility to Sclerotinia homeocarpa (Tables 4,5).
11. Good resistance to Fusarium blight incited by Fusarium roseum (Tables 10, 12,20,21).
12. Moderate resistance to Helminthosporium leaf spot and crown rot diseases (Tables 3,4,5,12,20,22).
13. Good overall turf quality based on performance trials from Beltsville, Illinois and New Jersey (Tables 2,3,4,5,12,19,20,23,24,25,26).



NOVELTY STATEMENT

Myatie Kentucky Bluegrass is a moderately low growing, turf-type variety which provides a light green color, relatively fine leaves and produces a dense, sward-like stand of turf. Flower initiation under New Jersey conditions has a low level to be significantly earlier than all varieties evaluated except for Kenblue and Delta, which were two and one day earlier than Myatie (Table I). Novelty of Myatie Kentucky Bluegrass is based on the unique combination of the following characteristics:

1. Displays an early flowering date (Table I).
2. Light green color.
3. Moderately early spring greenup (Table 2, 3, 4, 5, 6, 9, 10).
4. Produces a relatively short growing plant (Table II).
5. When maintained under turf conditions, Myatie compares well against Pos annua invasion (Tables 12, 13).
6. Produces extensive tillers per plant (Table II).
7. Good resistance to Myatie graminis (Tables 15, 17).
8. Moderate susceptibility to Prunella rose-herbaria (Table 16, 18).
9. Good resistance to Ustilago striiformis (Table 12, 19).
10. Moderate susceptibility to Sclerotinia homoeocarpa (Table 14, 20).
11. Good resistance to Pyricularia blight induced by Pyricularia blight (Table 12, 20, 21).
12. Moderate resistance to Helminthosporium leaf spot and Pyricularia blight (Table 12, 20, 21).
13. Good overall turf quality based on performance trials from New Jersey (Tables 2, 3, 4, 5, 12, 19, 20, 22, 24, 25, 26).





EXHIBIT B, SUPPLEMENT TO APPLICATION

Mystic Kentucky Bluegrass is most similar to Touchdown. However, Mystic and Touchdown differ by the following characteristics:

1. Mystic is significantly lower growing (13 cm shorter) than Touchdown (Table 11).
2. Mystic has a significantly longer flag leaf length (19 cm longer) than Touchdown (Table 32).
3. Mystic has a significantly longer panicle (19 mm longer) than Touchdown (Table 28).
4. Mystic displays a significantly less purple panicle color than Touchdown (Table 31).



EXHIBIT B, SUPPLEMENT TO A.1

1. Ivatic Kentucky Bluegrass is most similar to downy, lower, Ivatic and downy differ by the following characteristics:
1. Ivatic is significantly lower growing (15 cm shorter) than downy (Table 11).
  2. Ivatic has a significantly lower leaf length (19 cm longer) than downy (Table 12).
  3. Ivatic has a significantly lower seed weight (19 mm longer) than downy (Table 13).
  4. Ivatic displays a significantly less purple color than downy (Table 14).

RECEIVED

OCT 7 1981

U. S. DEPARTMENT



OF AGRICULTURE

AMS, LPG&S DIV.  
PVPO



TABLE 1 Date initiation of anthesis Kentucky bluegrass cultivars and selections at Adelphia, New Jersey, 1970.

Cultivar or selection	Date flowers first open
1. Kenblue*	May 18 to May 24
2. Delta	May 20 a**
3. Seawane 16	May 21 a
4. Echo Lake Plh(Mystic)	May 21 a
5. Nugget	May 23 b
6. Touchdown	May 23 b
7. Newport	May 25 c
8. Fylking	May 26 cd
9. Pennstar	May 26 cd
10. Galaxy	May 27 de
11. Majestic	May 27 de
12. Bonnieblue	May 27 de
13. Anheuser Dwarf	May 27 ef
14. Merion	May 29 fg
15. Adelphi	May 30 g
16. Glade	May 30 g
17. Brunswick	June 2 h

\*Kenblue is a mixture of different bluegrass types.

\*\*Dates followed by the same letter do not differ significantly at the 5 percent level of probability.



(b)(7)(D)

(b)(7)(F)





8100157  
TABLE 11 . Relative plant height comparisons of Kentucky bluegrass cultivars and selections in spaced-plant nurseries at Adelphia, New Jersey, 1970.

Cultivar or selection	Plant height, cm.
1. Primo	81
2. Warren's A-20	80
3. Geary	80
4. Newport	79
5. Palouse	79
6. Touchdown	74
7. Adelphi	73
8. Delta	73
9. Warren's A-34	73
10. Merion	70
11. Galaxy	69
12. Brunswick	68
13. Bonnieblue	68
14. Sydsport	67
15. Anheuser	67
16. Campus	65
17. Glade	64
18. Majestic	64
19. Arista	64
20. Prato	64
21. Seawane 16	62
22. Echo Lake Plh (Mystic)	61
23. Fylking	60
24. Pennstar	59
25. Nugget	43
LSD at 5%	7



(00830)  
(14676)





Table 15 Reaction of Kentucky bluegrass cultivars and selections to powdery mildew in a spaced-plant nursery at Adelphia, New Jersey during May 1974.

Cultivar or selection	Powdery mildew* rating 9 = most disease
1. Eclipse	0.0
2. Glade	0.0
3. Touchdown	0.0
4. Grenada	0.0
5. Anheuser Dwarf	0.0
6. Nugget	0.0
7. Monopoly	0.0
8. P-141 (Mystic)	0.0
9. Ram 1	0.0
10. Sydsport	0.5
11. Enmundi	0.5
12. Birka	0.5
13. Bristol	1.0
14. Plush	2.0
15. Campina	2.5
16. Baron	3.0
17. Cheri	3.5
18. Victa	3.5
19. Geronimo	4.0
20. Majestic	5.0
21. Prato	5.5
22. Brunswick	5.5
23. Bonnieblue	6.0
24. Adelphi	6.5
25. Vantage	6.5
26. Rugby	7.0
27. Parade	7.0
28. Pennstar	7.0
29. Fylking	7.0
30. Merion	8.0
31. Windsor	9.0
LSD @ 5%	1.4

\* Powdery mildew caused by Erysiphe graminis Pers.



(b)(7)(C)

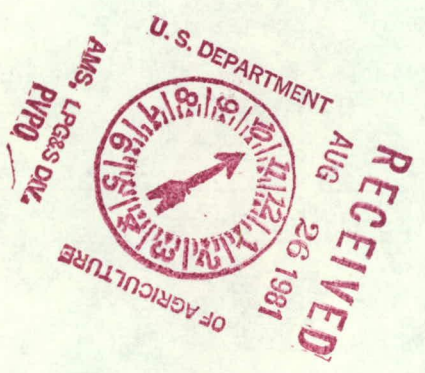


TABLE 16

Reaction of Kentucky bluegrass cultivars and selections to the leaf rust disease incited by Puccinia poae-nemoralis at Adelphia, New Jersey, during June 1970.

Cultivar or selection	Leaf rust disease rating 9 = most	Cultivar or Selection	Leaf rust disease rating 9 = most
1. Warren's A-20	0.3	17. Birka	1.5
2. Nugget	0.5	18. Prato	2.0
3. Touchdown	0.6	19. P-116	2.0
4. Glade	0.6	20. S-21	2.0
5. Anheuser Dwarf	0.6	21. Arista	2.5
6. Park	1.0	22. Warren's A-34	2.5
7. Adelphi	1.3	23. Brunswick	2.5
8. Fylking	1.5	24. Campus	3.0
9. Pennstar	1.5	25. Geary	3.0
10. Sydsport	1.5	26. Palouse	3.0
11. Primo	1.5	27. Newport	3.5
12. Delta	1.5	28. Baron	3.5
13. Bonnieblue	1.5	29. Merion	3.5
14. Majestic	1.5	30. Seawane 16	4.0
15. Galaxy	1.5	31. Echo Lake Plh(Mystic)	4.0
16. Belturf	1.5	32. Vantage	7.5
		LSD at 5%	1.1



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(city)

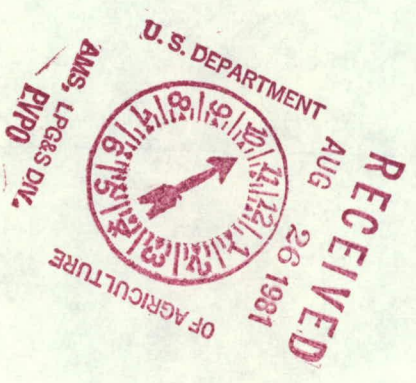


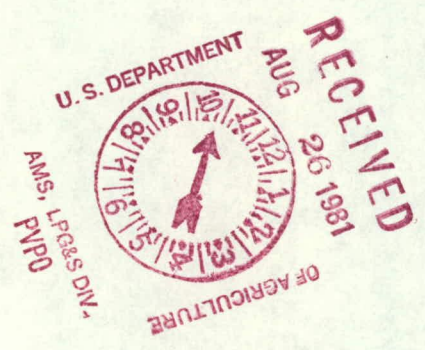
Table 21 Relative Susceptibility of Kentucky Bluegrass Varieties to *Fusarium* Blight in Illinois, 1975

Disease susceptibility levels						
High	Moderate		Low		No symptoms	
Delft	Ba 61-91	Kenblue	A-34	Merion	A-20	Monopoly
EVB-305	Brunswick	IL-3817	Ba 62-55	Cheri	Adelphi	P-59
K1-138	EVB-307	Nugget	Baron	Parade	Campina	P-140 (Mystic)
	Fylking	PSU-197	Bonnieblue	Plush	Edmundi	PSU-150
	Geronimo	Park	EVB-391	PSU-169	Glade	Sodco
	K1-157	Pennstar	Galaxy	PSU-190	K1-132	Touchdown
	K1-187	RAM #2	K1-131	RAM #1	K1-143	Victa
			K1-133	Sydsport	Majestic	Windsor
			K1-155	Vantage		
			K1-158			



1975

(MAY 1975)



- Relative panicle length comparisons of Kentucky bluegrass cultivars and selections in spaced-plant nurseries at Adelphia, New Jersey, 1970.

Cultivar or selection	Panicle length, mm
1. Geary	134
2. Warren's A-20	128
3. Seawane 16	121
4. Echo Lake Plh (Mystic)	120
5. Fylking	118
6. Majestic	109
7. Pennstar	106
8. Newport	105
9. Galaxy	105
10. Adelphi	104
11. Warren's A-34	103
12. Prato	103
13. Bonnieblue	102
14. Merion	102
15. Touchdown	101
16. Delta	100
17. Brunswick	98
18. Anheuser	96
19. Primo	96
20. Palouse	92
21. Campus	89
22. Arista	88
23. Glade	88
24. Sydsport	81
25. Nugget	67
LSD at 5%	16



(b)(7)(D)

(b)(7)(D)

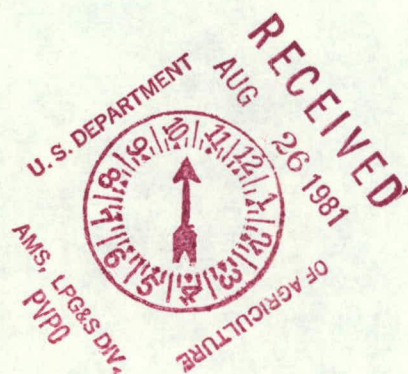


TABLE 31 - Relative panicle color comparisons of Kentucky bluegrass cultivars and selections in spaced-plant nurseries at Adelphia, New Jersey, 1970.

Cultivar or selection		0 = green Panicle color 5 = purple
1.	Nugget	5.0
2.	Touchdown	4.5
3.	Fylking	3.5
4.	Pennstar	3.5
5.	Geary	3.0
6.	Palouse	3.0
7.	Anheuser Dwarf	3.0
8.	Primo	3.0
9.	Echo Lake Plh (Mystic)	3.0
10.	Seawane 16	3.0
11.	Galaxy	2.5
12.	Glade	2.5
13.	Newport	2.5
14.	Prato	2.5
15.	Sydsport	2.5
16.	Adelphi	2.0
17.	Majestic	2.0
18.	Bonnieblue	2.0
19.	Delta	2.0
20.	Merion	2.0
21.	Warren's A-20	2.0
22.	Warren's A-34	1.5
23.	Arista	1.5
24.	Campus	1.5
25.	Brunswick	1.0
	LSD at 5%	0.8



(copy)

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TABLE 32

- relative flag leaf length comparisons of Kentucky bluegrass cultivars and selections in spaced-plant nurseries at Adelphia, New Jersey, 1970.

Cultivar or Selection	Flag leaf length, cm
1. Palouse	93
2. Geary	80
3. Seawane 16	79
4. Echo Lake Plh (Mystic)	77
5. Newport	77
6. Galaxy	73
7. Warren's A-34	70
8. Merion	69
9. Fylking	68
10. Bonnieblue	67
11. Delta	67
12. Warren's A-20	67
13. Pennstar	66
14. Prato	66
15. Majestic	63
16. Primo	61
17. Brunswick	60
18. Touchdown	58
19. Glade	55
20. Arista	55
21. Sydsport	54
22. Campus	53
23. Adelphi	52
24. Anheuser Dwarf	51
25. Nugget	38
LSD at 5%	12



(01/01/81)

(01/01/81)





## 10. PANICLE (Cont.):

table 29

☒ 2 ☒ 2 ☒ 8

NUMBER OF PANICLES PER PLANT

☐ ☐

MILLIGRAMS SEED PER PANICLE

☐ Branches LOWEST WHORL: 1 = DROOPING (Prato) 2 = HORIZONTAL (Merion) 3 = OTHER (Specify) \_\_\_\_\_☒ 1 ~~Table 30~~ Panicle Habit: 1 = NODDING (Newport) 2 = UPRIGHT (Nugget) ☐ ☐ MM. SPIKELET LENGTH

## 11. LEMMA

☐ KEEL☐ LATERAL NERVES

1 = GLABROUS 2 = SLIGHTLY PUBESCENT 3 = PUBESCENT 4 = OTHER (Specify) \_\_\_\_\_

☐ Intermediate Nerves: 1 = DISTINCT 2 = OBSCURE☐

Basal Webbing: 1 = NONE 2 = SCANT 3 = COPIOUS

## 12. SEED: table 27

☒ 2 Apomictin Percentage: 1 = MORE THAN 95 2 = 85 TO 95 3 = LESS THAN 85☒ 4 Phenol Reaction: 1 = NONE - LEMMA REMOVED (Merion) 2 = BEIGE (Cougar) 3 = BROWN (Windsor)  
4 = BLACK (Delta - 2 hours) 5 = BLACK (Anheuser - 24 hours)☐ 0 ☒ 6 ☒ 4

MM. WIDTH

☐ 2 ☒ 3 ☒ 9

MM. LENGTH

☐ 2 ☒ 6 ☒ 9GRAMS PER  
10,000 SEEDS☐ ☐

CHROMOSOME NO. (2n)

## 13. TURF DENSITY MAINTENANCE AT ONE INCH CUT:

☒ 3 1 = POOR 2 = MODERATE (Merion) 3 = SUPERIOR (Nugget) 4 = EXCELLENT

## 14. VERTICAL GROWTH RATE:

☒ 2 1 = SLOW (Nugget) 2 = MEDIUM (Merion) 3 = FAST (Delta) 4 = OTHER (Specify relation to a standard) \_\_\_\_\_

## 15. SPRING GREEN UP: tables 2,3,4,5,6,7,8,9,10

☒ 1 1 = EARLY (Windsor) 2 = MEDIUM (Fylking) 3 = LATE (Nugget)

## 16. FALL DORMANCY: (1 = Not Dormant; 2 = Intermediate; 3 = Dormant)

☒ 2 NORTHERN ( $42^{\circ} 30' \pm 30'$  Lat.)  
tables 4,5,19,25☒ 2 INTERMEDIATE ( $40^{\circ} \pm 30'$  Lat.)  
tables 2,3☐ SOUTHERN ( $37^{\circ} 30' \pm 30'$  Lat.)

## 17. SEEDLING VIGOR (Growth Rate):

☒ 2 Seedling: 1 = SLOW 2 = MEDIUM 3 = FAST

## 18. ENVIRONMENTAL RESISTANCE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

☒ 2 COOL TEMPERATURE  
(Winter color)☒ 2 COLD (Injury)☒ 2 HEAT☒ 2 DROUGHT tables 6,9☐ 0 SHADE☐ 0 POOR FERTILITY☐ 0 ACID SOIL☐ 0 ALKALINITY☐ 0 SALINITY☐ 0 SOIL COMPACTION☐ 0 POOR DRAINAGE☐ 0 AIR POLLUTION☐ OTHER (Specify) \_\_\_\_\_

## 19. DISEASE, INSECTS, AND NEMATODE RESISTANCE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

☒ 2 ~~HELMINTHOSPORIUM~~  
VAGANS tables 3,4,5,20,22☐ 0 H. SOROKINIANUM☐ 0 H. DICTYOIDES☐ 0 RHIZOCTONIA SOLANI☒ 2 ERYSIPE GRAMINIS  
table 15, 17☒ 2 USTILAGO STRIIFORMIS  
table 12,19☐ 0 FUSARIUM NIVALE☒ 2 F. ROSEUM tables 5,10,  
12,20,21☐ 0 TYPHULA IOTANA☐ 1 SCLEROTINIA  
HOMEOCARPA tables 4,5☐ 0 PUCCINIA GRAMINIA☒ 1 Puccinia poae-nemoralis  
tables 16,18☐ 0 PYTHIUM ULTIMATUM☐ 0 CRAMBUS  
BONIFATELLUS☐ 0 OTHER (Specify) \_\_\_\_\_

## REFERENCE

Nickerson's or any recognized color fan may be used to determine plant colors of the described variety.



UNITED STATES DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION  
 HYATTSVILLE, MARYLAND 20782

EXHIBIT C  
 (Bluegrass)

OBJECTIVE DESCRIPTION OF VARIETY  
 BLUEGRASS (POA SPP.)

NAME OF APPLICANT(S)

Lofts Seed Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

Chimney Rock Road, P.O. Box 146  
 Bound Brook, NJ 08805

FOR OFFICIAL USE ONLY

PVPO NUMBER

8100157

VARIETY NAME OR TEMPORARY DESIGNATION

Mystic Kentucky Bluegrass

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g., 089 or 09 ) when number is either 99 or less or 9 or less.

## 1. KIND:

2

1 = POA COMPRESSA 2 = P. PRATENSIS 3 = P. TRIVIALIS 4 = OTHER (Specify)

## 2. REGION OF BEST ADAPTATION:

1

1 = NORTHEAST 2 = TRANSITIONAL ZONE 3 = NORTH CENTRAL 4 = PACIFIC N.W. 5 = OTHER (Specify)

## 3. MATURITY (At First Anthesis): Table 1

1

1 = EARLY (Delta) 2 = MEDIUM EARLY (Fylking) 3 = MEDIUM (Newport) 4 = LATE (Merion)

05

NUMBER OF DAYS EARLIER THAN

2

1 = NUGGET

2 = FYLKING

01

NUMBER OF DAYS LATER THAN

3

3 = DELTA

4 = MERION

5 = NEWPORT

6 = BARON

## 4. PLANT HEIGHT (Longest Shoot from Soil Surface to Top of Head): table 11

061

CM. HEIGHT

09

CM. SHORTER THAN

4

1 = NUGGET

2 = FYLKING

18

CM. TALLER THAN

1

3 = DELTA

4 = MERION

5 = NEWPORT

6 = BARON

## 5. HABIT: table 14

11 = PROSTRATE (Fylking) 2 = SEMI-PROSTRATE (Merion)  
3 = ERECT (Delta)2

RHIZOMES

1

STOLONS

## 7. LEAF BLADE:

1Color: 1 = LIGHT GREEN (Rough Bluegrass) 2 = BLUE GREEN (Canada Bluegrass) 3 = MODERATELY DARK GREEN (Merion)  
4 = DARK GREEN (Adelphi) 5 = OTHER (Specify)2

Upper Surface: 1 = SHINY 2 = DULL

1

Lower Surface: 1 = SHINY 2 = DULL

00

MM. WIDTH

00

MM. LENGTH

## 8. LEAF SHEATH (Base):

1

Seedling Color: 1 = GREEN 2 = RED

00

MM. LENGTH

1

Keel: 1 = NOT KEELED 2 = KEELED

Surface:

1

1 = GLABROUS 2 = PUBESCENT

1

1 = SMOOTH 2 = ROUGH

1

1 = NON-GLAUCOUS 2 = GLAUCOUS

## 9. LEAFINESS (At First Anthesis):

0

Number of leaves per tiller or shoot: 1 = FEW (1 - 3) 2 = INTERMEDIATE (4 - 6) 3 = MANY (More than 6)

## 10. PANICLE: table 28

120

MM. LENGTH

015

MM. LONGER THAN

5

1 = NUGGET

2 = FYLKING

008

MM. SHORTER THAN

7

3 = DELTA

4 = MERION

5 = NEWPORT

6 = BARON

7 = Warren's A-20



FILED

JAN 14 1998

LONNA R. HOOKS  
SECRETARY OF STATECERTIFICATE OF MERGER OF  
LOFTS SEED, INC. INTO  
LOFTS MERGERCO, INC.To: The Secretary of State  
State of New Jersey

Pursuant to the provisions of Section 14A:10-7 Corporations, General, of the New Jersey Statutes, the undersigned corporations hereby execute the following Certificate of Merger.

## ARTICLE ONE

The names of the corporations proposing to merge and the states under the laws of which such corporations are organized, are as follows:

Name of CorporationState of IncorporationLofts Seed, Inc.  
Lofts Mergerco, Inc.New Jersey  
Nevada

## ARTICLE TWO

The laws of the State of Nevada, the state under which such foreign corporation is organized, permit such merger and the applicable provisions of the laws of said jurisdiction have been, or upon compliance with filing and recording requirements will have been, complied with.

## ARTICLE THREE

The name of the surviving corporation shall be Lofts Mergerco, Inc. and it shall be governed by the laws of the State of Nevada.

The address of the surviving corporation's registered office is 2700 Sunset Rd., Las Vegas, Nevada 89120 and the name of the registered agent at such address is Johnny Thomas.

## ARTICLE FOUR

The following plan of Merger was approved by the shareholders of the undersigned domestic corporation in the manner prescribed by the New Jersey Business Corporation Act, and was approved by the undersigned foreign corporation in the manner prescribed by the laws of the State under which it is organized:

0100731429





**FILED**  
IN THE OFFICE OF THE  
SECRETARY OF STATE OF THE  
STATE OF NEVADA

**CERTIFICATE OF AMENDMENT OF**

**ARTICLES OF INCORPORATION OF**

**LOFTS MERGERCO, INC.**

**JAN 26 1998**

*26394-92*

*Jan Heller*  
JAN HELLER, SECRETARY OF STATE

Pursuant to the provisions of Nevada Revised Statutes, Title 7, Chapter 78, the undersigned officers do hereby certify:

**FIRST:** The name of the Corporation is **Lofts Mergerco, Inc.**

**SECOND:** The Board of Directors of the Corporation duly adopted the following resolutions on January 19, 1998:

**RESOLVED**, that it is advisable in the judgment of the Board of Directors of the Corporation that the name of the Corporation be changed, and that, in order to accomplish the same, Article **FIRST** of the Articles of Incorporation be amended to read as follows:

**"FIRST:** The name of the corporation (hereinafter called the Corporation) is **Lofts Seed Company, Inc.**"

**FURTHER RESOLVED**, that a special meeting of the sole stockholder having voting power be and it is hereby called and that notice be given in the manner prescribed by the By-laws of the Corporation and by Nevada Revised Statutes, Title 7, Chapter 78, unless the said stockholder shall waive the notice of meeting in writing or unless the said stockholder shall dispense with the holding of a meeting and shall take action upon the proposed amendment by a consent in writing signed by the sole stockholder; and

**FURTHER RESOLVED**, that in the event that the said stockholder shall adopt the aforesaid proposed amendment by a vote in favor thereof by at least a majority of the voting power or by a written consent in favor thereof signed by the sole stockholder without a meeting, the Corporation is hereby authorized to make by the hands of its President or a Vice President and by its Secretary or an Assistant Secretary a certificate setting forth the said amendment and to cause the same to be filed pursuant to the provisions of Nevada Revised Statutes, Title 7, Chapter 78.











NOV 29 1999

No.

C 79460-89

Dean Heller

DEAN HELLER, SECRETARY OF STATE

ARTICLES OF MERGER  
OF  
LOFTS SEED COMPANY, INC.  
INTO  
AGRIBIOTECH, INC.

Pursuant to the provisions of N.S.R. § 92A.180 and N.R.S. § 92A.200, AgriBioTech, Inc., a Nevada corporation, hereby submits these Articles of Merger for the purpose of merging Loft's Seed Company, Inc., a Nevada corporation and wholly-owned subsidiary of AgriBioTech, Inc., into AgriBioTech, Inc.

ARTICLE I.

Corporations Proposing to Merge and Surviving Corporation

The name of the merging corporation is Loft's Seed Company, Inc., a Nevada corporation (hereinafter called the "Subsidiary Corporation"); and the name of the corporation which shall be the surviving corporation is AgriBioTech, Inc., a Nevada corporation (hereinafter called the "Parent Corporation").

ARTICLE II.

Adoption of Plan of Merger

The Plan of Merger set forth in Article IV was duly adopted by the Parent Corporation and the Subsidiary Corporation.

ARTICLE III.

Approval by Shareholders

Pursuant to N.R.S. § 92A.180, neither the approval of the Shareholders of the Parent Corporation, nor the approval of the Shareholders of the Subsidiary Corporation was required.

ARTICLE IV.

Plan of Merger

The following Plan of Merger was duly approved on November 15, 1999, in the manner prescribed by law with respect to each of the corporations participating in the Merger:

Section 1. Corporations Proposing to Merge and Surviving Corporation. The name of the merging corporation is Loft's Seed Company, Inc., a Nevada corporation (hereinafter called the "Subsidiary Corporation"); and the name of the corporation which shall be the surviving corporation is AgriBioTech, Inc., a Nevada corporation (hereinafter called the "Parent Corporation").





Section 2. Effective Time of Merger. The effective time of the merger shall be November 29, 1999 at 11:59 p.m. E.S.T. (the "Effective Time").

Section 3. Effects of Merger. The Merger shall have the effects set forth in N.R.S. § 92A.250.

Section 4. Conversion of Shares. Each share of capital stock of the Subsidiary Corporation issued and outstanding at the Effective Time shall, as of the Effective Time, by virtue of the Merger and without any action on the part of the holder thereof, be canceled and extinguished without consideration given therefor. The shares of capital stock of the Surviving Corporation shall continue to be outstanding without change.

Section 5. Articles of Incorporation and Bylaws. The Articles of Incorporation and the Bylaws of the Surviving Corporation as in effect immediately prior to the Effective Time shall become the Articles of Incorporation and Bylaws of the Surviving Corporation following the Effective Time until changed in accordance with their terms and applicable law.

*[Signature page to follow]*

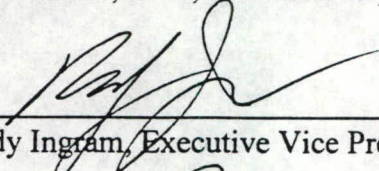


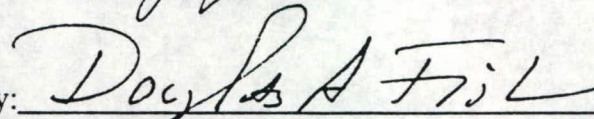




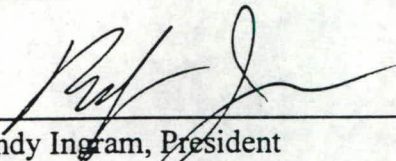
This the 15<sup>th</sup> day of November, 1999.

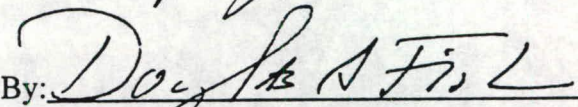
AGRIBIOTECH, INC., a Nevada corporation

By:   
Randy Ingram, Executive Vice President

By:   
Douglas A. Fisher, Secretary

LOFTS SEED COMPANY, INC., a Nevada corporation

By:   
Randy Ingram, President

By:   
Douglas A. Fisher, Secretary





UNITED STATES DEPARTMENT OF AGRICULTURE  
PLANT VARIETY PROTECTION OFFICE

CERTIFICATE OF MAILING

BOX ASSIGNMENT

Acting Commissioner of the Plant Variety Protection Office  
Plant Variety Protection Office  
10301 Baltimore Blvd.  
Beltsville, MD 20705-2351.

Dear Sir:

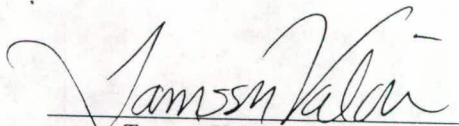
I hereby certify that this correspondence,

74 Cover sheets  
74 Assignments  
Check in the amount of \$1,850.00 (74 x \$25.00)  
74 Return postcards

for the attached (in Exhibit A) PVP certificate numbers are being deposited with the United States Postal Service as Express Mail, mailing label number EE507465254US, postage prepaid, in an envelope addressed to:

BOX ASSIGNMENT

Acting Commissioner of the Plant Variety Protection Office  
Plant Variety Protection Office  
10301 Baltimore Blvd.  
Beltsville, MD 20705-2351.

  
Tamsen Valoir

Date: July 1, 1998

IPHOU:15412.1 20992-00039

**Jenkins & Gilchrist**

A PROFESSIONAL CORPORATION  
1100 LOUISIANA STREET, SUITE 1800  
HOUSTON, TEXAS 77002

TEXAS COMMERCE BANK, N.A.  
301 W. BEAUREGARD  
SAN ANGELO, TEXAS 76903

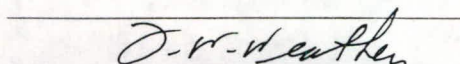
903870

DATE	AMOUNT
July 1, 1998	*\$1,850.00*

AY \*One Thousand Fifty Dollars and 00 Cents\*

TO THE  
ORDER  
OF

U. S. Department Of Agriculture  
Plant Variety Protection Office



TWO SIGNATURES REQUIRED OVER \$2500  
VOID AFTER 180 DAYS  
NOT VALID FOR OVER \$5000

⑈0903870⑈ ⑆111300880⑆ ⑈06300009654⑈





STATE OF )  
 ) SS.:  
COUNTY OF )

R#0185253.01





The Company hereby further acknowledges and affirms that the rights and remedies of the Lender with respect to the security interest in and lien upon the Company's rights in the Agricultural Intellectual Property Collateral made and granted hereby are more fully set forth in the Loan Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein.

Further, by this Security Agreement, the Company agrees to assign to Lender, upon the occurrence of an Event of Default by the Company (as defined in the Loan Agreement), all of the Company's rights in and to the Agricultural Intellectual Property Collateral; provided that this assignment is expressly contingent upon the occurrence of an Event of Default.

This Security Agreement will become effective June 28, 1996 at the Effective Time of the Merger of Budd Acquisition, Inc., a New Jersey corporation, with and into Lofts Seed Inc., a New Jersey corporation, as provided in a Certificate of Merger to be filed with the New Jersey Secretary of State's office.

IN WITNESS WHEREOF, the Company has caused this Security Agreement to be duly executed by its authorized officer of agent as of June 28, 1996.

LOFTS SEED INC.

[Corporate Seal]

By: Richard P. Budd

Name:

Title: CEO

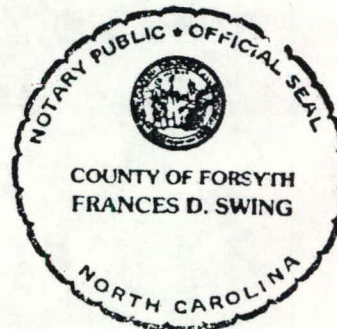
On JUNE 28, 1996, RICHARD P. BUDD personally came before me, FRANCES D. SWING, a Notary Public for said County and State, RICHARD P. BUDD who being by me duly sworn, says that he is CEO of Lofts Seed Inc., and that said writing was signed and sealed by him on behalf of said corporation by its authority duly given. The said RICHARD P. BUDD acknowledged the said writing to be the act and deed of the corporation.

WITNESS my hand and notarial seal.

Frances D. Swing  
Notary Public

My Commission Expires: 2-9-97

Dated this 28<sup>th</sup> day of June 1996.







**SCHEDULE A**  
**AGRICULTURAL INTELLECTUAL PROPERTY COLLATERAL**  
**(CERTIFICATES OF PLANT VARIETY PROTECTION)**

**A. KENTUCKY BLUEGRASS**

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Princeton P105	9600228	4-22-96	Pending	
Eagleton	9600277	6-11-96	Pending	
Preakness	9500090	2-13-95	Pending	
Mystic	8100157	8-26-81	5-27-82	5-27-00
Georgetown	8200187	1982	7-24-83	7-21-01
Lofts 1757	8800230	1988	9-30-92	9-30-10
Laser (Rough Bluegrass)	8900288	1989	10-31-91	10-31-09
Co-owned PVPs				
243 (Nassau)*	8400005	1983	12-21-84	12-21-02
Suffolk*	8800072	1988	5-31-88	5-31-06
Ram I**	7800069	1978	3-15-79	3-15-96

\* Jacklin Seed Company listed as co-owner

\*\* Mrs. Barbara B. Curtis listed as co-owner

**B. PERENNIAL RYEGRASS**

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Palmer	8200178	9-8-82	5-31-84	5-31-02
Palmer II	9200209	6-16-92	Pending	
Prelude	8200177	9-8-82	5-31-84	5-31-02
Prelude II	9200210	6-16-92	Pending	
Yorktown III	9200212	6-16-92	Pending	





VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Repell	8400148	8-30-84	11-29-85	11-29-03
Yorktown II	7800001	10-6-77	5-1-80	5-1-97
Repell II	9200211	6-16-92	Pending	

**C. TALL FESCUE**

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Rebel	8000153	8-21-80	5-14-81	5-14-99
Rebel III	9500129	4-10-95	Pending	
Rebel Jr.	9000240	1990	11-30-92	11-30-10
Rebel 3D	9300200	4-21-93	Pending	
Tribute	8800235	9-15-88	2-28-90	2-28-08
Clemfine	8200175	9-7-82	2-28-83	2-28-01
Rebel II	8700195	1987	1-15-88	1-15-06

**D. FINE FESCUE**

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Reliant	8200168	1982	2-28-83	2-28-01
Jamestown II	9100254	1991	8-31-95	8-31-15





**E. BENTGRASS**

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
L93	9600256	5-8-96	Pending	
Southshore	9200256	1992	10-31-94	10-31-12

**F. OTHER**

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Salty (weeping alkaligrass)	9500128	4-10-95	Pending	
Laser II (rough bluegrass)	9500238	6-15-95	Pending	





RECORDATION FORM COVER SHEET  
PVP CERTIFICATES ONLY

To the Acting Commissioner of the Plant Variety Protection Office. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

**LOFTS SEED COMPANY, INC.**

- ☐ Individual(s) ☐ Association  
☐ General Partnership ☐ Limited Partnership  
☒ Corporation - State Nevada  
☐ Other \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☐ Assignment ☐ Merger  
☒ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: June 23, 1998

2. Name and address of receiving party(ies):

Name: BANKAMERICA BUSINESS CREDIT, INC.

Street Address: 55 South Lake Avenue, Suite 900

City: Pasadena State: California

ZIP: 91101

- ☐ Individual(s) citizenship \_\_\_\_\_  
☐ Association \_\_\_\_\_  
☐ General Partnership \_\_\_\_\_  
☐ Limited Partnership \_\_\_\_\_  
☒ Corporation-State Delaware  
☐ Other \_\_\_\_\_

If assignee is not domiciled in the United States, a domestic representative designation is attached: ☐ Yes ☐ No  
(Designation must be a separate document from Assignment)  
Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. PVP certificate identifying information:

A. PVP No.: **8100157**

B. Date certificate issued or application filed: **05/27/82**

C. Variety: **"MYSTIC" Bluegrass, kentucky**

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Tamsen Valoir

Jenkins & Gilchrist

Internal Address: \_\_\_\_\_

Street Address: 1445 Ross Avenue,

Suite 3200

City: Dallas State: Texas Zip: 75202-2799

6. Total number of PVP applications or certificates involved: **1**

7. Total fee (37 CFR 3.41): \$ **25.00**

- ☒ Enclosed  
☐ Authorized to be charged to deposit account.

8. Deposit Account number: \_\_\_\_\_

(Attach duplicate copy of this page if paying by deposit account)

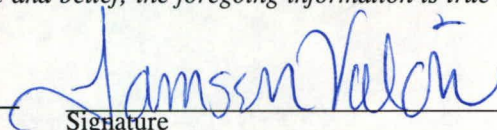
DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Tamsen Valoir

Name of Person Signing



Signature

June 30, 1998

Date

Total number of pages comprising cover sheet:

**1**



'98 JUL -2 P2:12

RECEIVED  
USDA-AMS-PVPD

## **PVP CERTIFICATE ASSIGNMENT**

**WHEREAS**, LOFTS SEED COMPANY, INC., a Nevada corporation ("Assignor"), having a business address of 191 Budd Blvd., Winston Salem, NC 27114, is the owner of the pending or issued Plant Protection Act (PVP) certificate(s) listed below; and

**WHEREAS**, BankAmerica Business Credit, Inc., a Delaware corporation, having an office at 55 South Lake Avenue, Suite 900, Pasadena, California 91101 as "Agent" for the "Lenders" as defined and described in the Loan and Security Agreement dated as of June 23, 1998 ("Assignee"), is desirous of acquiring a SECURITY INTEREST in such PVP certificate(s);

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, said Assignor does hereby sell, assign, transfer and set over unto the said Assignee a SECURITY INTEREST in, to, and under the PVP certificate(s):

No. 9600256 Pending  
No. 9200256 Issued  
No. 9500090 Pending  
No. 9600228 Pending  
No. 9600277 Pending  
No. 8100157 Issued  
No. 8200187 Issued  
No. 8800230 Issued  
No. 9500238 Pending  
No. 8900288 Issued  
No. 9300200 Pending  
No. 9500129 Pending  
No. 8000153 Issued  
No. 8200175 Issued  
No. 8700195 Issued  
No. 8800235 Issued  
No. 9000240 Issued  
No. 9200209 Pending  
No. 9200210 Pending  
No. 9200211 Pending  
No. 9200212 Pending  
No. 8200177 Issued  
No. 8200178 Issued  
No. 8400148 Issued  
No. 8200168 Issued  
No. 9100254 Issued  
No. 9500128 Issued

28 TT -S- 05-15

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USDA-AMS-PVPD

LOFTS SEED COMPANY, INC.

By: \_\_\_\_\_

Printed Name: Henry A. Ingalls

Title: Vice President

STATE OF TEXAS

§

§

COUNTY OF DALLAS

§

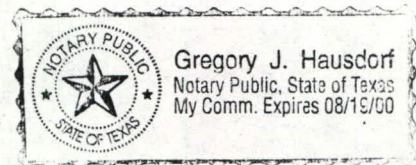
Henry A. Ingalls, Vice President, of LOFTS SEED COMPANY, INC., personally appeared before me, and being first duly sworn declared that he signed the security agreement in the capacity designated, and further states that he has read the above security agreement, and the statements therein contained are true.

SUBSCRIBED AND SWORN TO before me this 23 day of June, 1998.

\_\_\_\_\_  
Notary Public in and for the State of Texas

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Printed Name



38 JUL -5 1998  
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USDA-AMS-PVPO